Date: October 15, 2003

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL PROVISION

Section 400—Hot Mix Asphaltic Concrete Construction

Delete Subsection 400.3.06.B and substitute the following:

B. Compaction

Determine the mixture compaction using either GDT 39 or GDT 59. The compaction is accepted in lots defined in Subsection 400.3.06. A "Acceptance Plans for Gradation and Asphalt Cement Content" and is within the same lot boundaries as the mixture acceptance.

1. Calculate Pavement Mean Air Voids

   The Department will calculate the pavement air voids placed within each lot as follows:

   a. Average the results of 5 tests run on randomly selected sites in that lot.

   b. Select the random sites using GDT 73.

   Density tests are not required for asphaltic concrete placed at 90 lbs/yd^2 (50 kg/m^2) or less, 4.75 mm mix, and asphaltic concrete OGFC and PEM. Compact these courses to the Engineer's satisfaction.

   The targeted Pavement Mean Air Void content for all Stone Matrix Asphalt and Superpave mixtures is 5.0 percent. Ensure that the maximum Pavement Mean Air Voids for all Superpave and Stone Matrix Asphalt mixtures does not exceed 7.0 percent. The Adjustment Period for density is four lots or four production days, whichever is less, to ensure that maximum compactive effort has been achieved which will yield no more than 7.0 percent Mean Air Voids. If the contractor needs to adjust the mixture to improve density results, a change in the job mix formula may be requested for approval so long as the following values are not exceeded:

   - Coarse pay sieve ± 4%
   - No. 8 (2.36 mm) sieve ± 2%
   - No. 200 (75 μm) sieve ± 1%
   - Asphalt Content ± 0.2%
   - All value changes must still be within specification limits

   If the Office of Materials and Research is satisfied that the contractor has exerted the maximum compactive effort and is not able to maintain Pavement Mean Air Voids at no more than 7.0%, the Engineer may establish a maximum target for Pavement Mean Air Voids.

   Mixture placed during the adjustment period for density shall meet the requirements for a 0.90 pay factor in Table 12 of Subsection 400.5.01.C, "Calculate Mean Pavement Air Voids." Mixture which does not meet these density requirements shall be paid for using the applicable pay factor.

   If the mean air voids of the pavement placed within a lot exceeds 7.0% (or 100% of the maximum target air voids, if established) and the Engineer determines that the material need not be removed and replaced, the lot may be accepted at an adjusted unit price as determined by the Engineer.

2. Obtain Uniform Compaction

   For a lot to receive a pay factor of 1.00 for compaction acceptance, the air void range cannot exceed 4 percent for new construction or 5 percent for resurfacing projects. The range is the difference between the highest and lowest acceptance test results within the affected lot. If the air void range exceeds these tolerances, apply a Pay Factor of 95%.

The 5% reduced pay factor for the compaction range does not apply in these instances:

- The mixture is placed during the adjustment period as defined in Subsection 400.5.01.A, “Materials Produced and Placed During the Adjustment Period.”
- All air void results within a given lot are less than 7.0%.